

Serial Number: 09/981,123

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically:
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☒ Inserted or corrected ^{amino acid} ~~amino acid~~ number at the ^{bottom} ~~end of~~ ^{amino acid} ~~amino acid~~ line. SEQ ID NO's edited: 4
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file;
☐ page numbers throughout text; ☐ other invalid text, such as _____
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

#2

OIPE

RAW SEQUENCE LISTING
 PATENT APPLICATION: US/09/981,123

DATE: 11/13/2001
 TIME: 10:08:46

Input Set : A:\PTO.DC.txt
 Output Set: N:\CRF3\11132001\I981123.raw

3 <110> APPLICANT: Holloway, James L.
 5 <120> TITLE OF INVENTION: Human Serine Protease
 7 <130> FILE REFERENCE: 99-88C1
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/981,123
 C--> 9 <141> CURRENT FILING DATE: 2001-10-16
 9 <150> PRIOR APPLICATION NUMBER: 60/167,038
 10 <151> PRIOR FILING DATE: 1999-11-23
 12 <150> PRIOR APPLICATION NUMBER: 09/715,994
 13 <151> PRIOR FILING DATE: 2000-11-17
 15 <160> NUMBER OF SEQ ID NOS: 4
 17 <170> SOFTWARE: FastSEQ for Windows Version 3.0
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 807
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Homo sapiens
 24 <220> FEATURE:
 25 <221> NAME/KEY: CDS
 26 <222> LOCATION: (1)...(807)
 28 <400> SEQUENCE: 1

29	agg atc att ggg ggc cga aat gct gag cct ggc ctg ttc ccg tgg cag	48
30	Arg Ile Ile Gly Gly Arg Asn Ala Glu Pro Gly Leu Phe Pro Trp Gln	
31	1 5 10 15	
33	gcc ctg ata gtg gtg gag gac act tcg aga gtg cca aat gac aag tgg	96
34	Ala Leu Ile Val Val Glu Asp Thr Ser Arg Val Pro Asn Asp Lys Trp	
35	20 25 30	
37	ttt ggg agt ggg gcc ctg ctc tct gcg tcc tgg atc ctc aca gca gct	144
38	Phe Gly Ser Gly Ala Leu Leu Ser Ala Ser Trp Ile Leu Thr Ala Ala	
39	35 40 45	
41	cat gtg ctg cgc tcc cag cgt aga gac acc acg gtg ata cca gtc tcc	192
42	His Val Leu Arg Ser Gln Arg Arg Asp Thr Thr Val Ile Pro Val Ser	
43	50 55 60	
45	aag gag cat gtc acc gtc tac ctg ggc ttg cat gat gtg cga gac aaa	240
46	Lys Glu His Val Thr Val Tyr Leu Gly Leu His Asp Val Arg Asp Lys	
47	65 70 75 80	
50	tcg ggg gca gtc aac agc tca gct gcc cga gtg gtg ctc cac cca gac	288
51	Ser Gly Ala Val Asn Ser Ser Ala Ala Arg Val Val Leu His Pro Asp	
52	85 90 95	
54	ttc aac atc caa aac tac aac cac gat ata gct ctg gtg cag ctg cag	336
55	Phe Asn Ile Gln Asn Tyr Asn His Asp Ile Ala Leu Val Gln Leu Gln	
56	100 105 110	
58	gag cct gtg ccc ctg gga ccc cac gtt atg cct gtc tgc ctg cca agg	384
59	Glu Pro Val Pro Leu Gly Pro His Val Met Pro Val Cys Leu Pro Arg	
60	115 120 125	
62	ctt gag cct gaa ggc ccg gcc ccc cac atg ctg ggc ctg gtg gcc gcc	432
63	Leu Glu Pro Glu Gly Pro Ala Pro His Met Leu Gly Leu Val Ala Gly	
64	130 135 140	
66	tgg ggc atc tcc aat ccc aat gtg aca gtg gat gag atc atc agc agt	480

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Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\11132001\I981123.raw

```

67 Trp Gly Ile Ser Asn Pro Asn Val Thr Val Asp Glu Ile Ile Ser Ser
68 145 150 155 160
70 ggc aca cgg acc ttg tca gat gtc ctg cag tat gtc aag tta ccc gtg 528
71 Gly Thr Arg Thr Leu Ser Asp Val Leu Gln Tyr Val Lys Leu Pro Val
72 165 170 175
74 gtg cct cac gct gag tgc aaa act agc tat gag tcc cgc tcg ggc aat 576
75 Val Pro His Ala Glu Cys Lys Thr Ser Tyr Glu Ser Arg Ser Gly Asn
76 180 185 190
78 tac agc gtc acg gag aac atg ttc tgt gct ggc tac tac gag ggc ggc 624
79 Tyr Ser Val Thr Glu Asn Met Phe Cys Ala Gly Tyr Tyr Glu Gly Gly
80 195 200 205
82 aaa gac acg tgc ctt gga gat agc ggt ggg gcc ttt gtc atc ttt gat 672
83 Lys Asp Thr Cys Leu Gly Asp Ser Gly Gly Ala Phe Val Ile Phe Asp
84 210 215 220
86 gac ttg agc cag cgc tgg gtg gtg caa ggc ctg gtg tcc tgg ggg gga 720
87 Asp Leu Ser Gln Arg Trp Val Val Gln Gly Leu Val Ser Trp Gly Gly
88 225 230 235
90 cct gaa gaa tgc ggc agc aag cag gtc tat gga gtc tac aca aag gtc 768
91 Pro Glu Glu Cys Gly Ser Lys Gln Val Tyr Gly Val Tyr Thr Lys Val
92 245 250 255
93 tcc aat tac gtg gac tgg gtg tgg gag cag atg ggc tta 807
94 Ser Asn Tyr Val Asp Trp Val Trp Glu Gln Met Gly Leu
95 260 265
97 <210> SEQ ID NO: 2
98 <211> LENGTH: 269
99 <212> TYPE: PRT
100 <213> ORGANISM: Homo sapiens
102 <400> SEQUENCE: 2
103 Arg Ile Ile Gly Gly Arg Asn Ala Glu Pro Gly Leu Phe Pro Trp Gln
104 1 5 10 15
105 Ala Leu Ile Val Val Glu Asp Thr Ser Arg Val Pro Asn Asp Lys Trp
106 20 25 30
107 Phe Gly Ser Gly Ala Leu Leu Ser Ala Ser Trp Ile Leu Thr Ala Ala
108 35 40 45
109 His Val Leu Arg Ser Gln Arg Arg Asp Thr Thr Val Ile Pro Val Ser
110 50 55 60
111 Lys Glu His Val Thr Val Tyr Leu Gly Leu His Asp Val Arg Asp Lys
112 65 70 75 80
113 Ser Gly Ala Val Asn Ser Ser Ala Ala Arg Val Val Leu His Pro Asp
114 85 90 95
115 Phe Asn Ile Gln Asn Tyr Asn His Asp Ile Ala Leu Val Gln Leu Gln
116 100 105 110
117 Glu Pro Val Pro Leu Gly Pro His Val Met Pro Val Cys Leu Pro Arg
118 115 120 125
119 Leu Glu Pro Glu Gly Pro Ala Pro His Met Leu Gly Leu Val Ala Gly
120 130 135 140
121 Trp Gly Ile Ser Asn Pro Asn Val Thr Val Asp Glu Ile Ile Ser Ser
122 145 150 155 160
123 Gly Thr Arg Thr Leu Ser Asp Val Leu Gln Tyr Val Lys Leu Pro Val

```

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Input Set : A:\PTO.DC.txt
Output Set: N:\CRF3\11132001\I981123.raw

```

124                               165           170           175
125 Val Pro His Ala Glu Cys Lys Thr Ser Tyr Glu Ser Arg Ser Gly Asn
126                               180           185           190
127 Tyr Ser Val Thr Glu Asn Met Phe Cys Ala Gly Tyr Tyr Glu Gly Gly
128                               195           200           205
131 Lys Asp Thr Cys Leu Gly Asp Ser Gly Gly Ala Phe Val Ile Phe Asp
132                               210           215           220
133 Asp Leu Ser Gln Arg Trp Val Val Gln Gly Leu Val Ser Trp Gly Gly
134                               225           230           235           240
135 Pro Glu Glu Cys Gly Ser Lys Gln Val Tyr Gly Val Tyr Thr Lys Val
136                               245           250           255
137 Ser Asn Tyr Val Asp Trp Val Trp Glu Gln Met Gly Leu
138                               260           265

```

140 <210> SEQ ID NO: 3

141 <211> LENGTH: 807

142 <212> TYPE: DNA

143 <213> ORGANISM: Artificial Sequence

145 <220> FEATURE:

146 <223> OTHER INFORMATION: This degenerate sequence encodes the amino acid
sequence of SEQ ID NO:2.

149 <221> NAME/KEY: variation

150 <222> LOCATION: (1)...(807)

151 <223> OTHER INFORMATION: N is any nucleotide.

153 <400> SEQUENCE: 3

```

W--> 154 mgnathathg gnggnmgnaa ygcngarccn ggnyntttyc cntggcargc nytnathgtn      60
W--> 155 gtngargaya cnwsnmngnt nccnaaygay aartggttyg gnwsnggngc nytnytnwsn      120
W--> 156 gcnwsntgga thytnacngc ngcncaygtn ytnmgwnsnc armgnmgnga yacnacngtn      180
W--> 157 athccngtnw snaargarca ygtnacngtn tayytnngny tncaygaygt nmngngayaar      240
W--> 158 wsnggngcng tnaaywsnws ngcngcnmgn gtngtnytn cngtncnnyt nggncncay      300
W--> 159 aaytayaayc aygayathgc nytngtncar ytnccargc cngtncnnyt nggncncay      360
W--> 160 gtngatgccng tntggytnc nmgnytnGAR ccngarggnc cngcncncay yatgytnngn      420
W--> 161 ytngtngcng gntggggnat hwsnaayccn aaygtnacng tngaygarat hathwsnwsn      480
W--> 162 ggnacnmgna cnytnwsnga ygtnytnCAR taygtnaary tncngtngt nccncaygcn      540
W--> 163 gartgyaara cnwsntayga rwsnmgnwsn ggnaaytayw sngtnacnga raayatgty      600
W--> 164 tgygcnggnt aytaygargg nggnaargay acntgyytn gngaywsngg nggngcntty      660
W--> 165 gtnathhttyg aygayytnws ncarmgntgg gtngtncarg gnytngtnws ntggggnggn      720
W--> 166 ccngargart gygggnwsnaa rcargtntay ggngtntaya cnaargtnws naaytaygtn      780
W--> 167 gaytgggtnt gggarcarat gggnytn      807

```

169 <210> SEQ ID NO: 4

170 <211> LENGTH: 16

171 <212> TYPE: PRT

172 <213> ORGANISM: Artificial Sequence

174 <220> FEATURE:

175 <223> OTHER INFORMATION: Peptide linker.

177 <400> SEQUENCE: 4

```

178 Gly Gly Ser Gly Gly Ser Gly Gly Gly Gly Ser Gly Gly Gly Ser
179 1                               5                               10                               15

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/981,123

DATE: 11/13/2001

TIME: 10:08:47

Input Set : A:\PTO.DC.txt

Output Set: N:\CRF3\11132001\I981123.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:155 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:156 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:157 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:158 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:159 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:160 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:161 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:162 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:163 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3